



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/632,875 Confirmation No.: 3042  
Applicants: Schinazi *et al.*  
Filed: August 1, 2003  
TC/A.AU.: 1646  
Examiner: Unassigned  
  
Docket No.: 08841.105009 PHA 1060 US  
Customer No.: 20786  
Title: 2',3'-Dideoxynucleoside Analogues for the Treatment or Prevention of  
Flaviviridae Viral Infection

Commissioner for Patents  
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Respectfully submitted,

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Date: February 5 2004  
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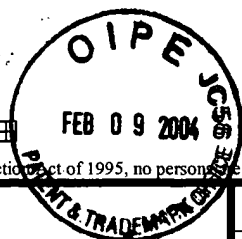
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Sheet **1** of **2**

### Complete if Known

Application Number	10/632,875
Filing Date	August 1, 2003
First Named Inventor	Schinazi <i>et al.</i>
Group Art Unit	1646
Examiner Name	Unassigned
Attorney Docket Number	08841.105009 PHAR 1060 US

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### U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Number	Kind Code <sup>2</sup> (if known)				
	AA	3,798,209		Witkowski <i>et al.</i>	03-19-1974		
	AB	RE 29,835		Witkowski <i>et al.</i>	11-14-1978		
	AC	4,788,181		Driscoll <i>et al.</i>	11-29-1988		
	AD	5,106,962		Amino <i>et al.</i>	04-21-1992		
	AE	5,220,003		Jung <i>et al.</i>	06-15-1993		
	AF	5,631,239		Lin <i>et al.</i>	05-20-1997		
	AG	2002/0147160	A1	Bhat <i>et al.</i>	10-10-2002		
	AH	2003/0008841	A1	Devos <i>et al.</i>	01-09-2003		
	AI	2003/0028013	A1	Wang <i>et al.</i>	02-06-2003		
	AJ	2003/0050229	A1	Sommadossi <i>et al.</i>	03-13-2003		
	AK	2003/0060400	A1	LaColla <i>et al.</i>	03-27-2003		
	AL	2003/0083307	A1	Devos <i>et al.</i>	05-01-2003		
	AM	2003/0087873	A1	Stuyver <i>et al.</i>	05-08-2003		

### FOREIGN PATENT DOCUMENTS

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		Office <sup>3</sup>	Number	Kind Code (if known)				
	AN	WO	99/43691	A1	Emory; U. Ga. Res. Found.	09-02-1999		
	AO	WO	01/32153	A2	Biochem Pharma	05-10-2001		
	AP	WO	01/60315	A2	Biochem Pharma	08-23-2001		
	AQ	WO	01/79246	A2	Pharmasset Ltd.	10-25-2001		
	AR	WO	01/90121	A2	Novirio (Idenix); U....Cagliari	11-29-2001		
	AS	WO	01/92282	A2	Novirio (Idenix); U....Cagliari	12-06-2001		
	AT	WO	02/018404	A2	F. Hoffman-La Roche AG	03-07-2002		
	AU	WO	02/032920	A2	Pharmasset Ltd.	04-25-2002		
	AV	WO	02/48165	A2	Pharmasset Ltd.	06-20-2002		

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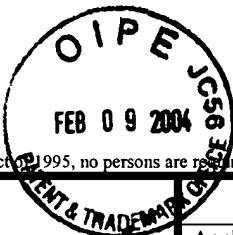
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Sheet	2	of	2		

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		Office <sup>3</sup>	Number	Kind Code (if known)				
	BA	WO	02/057287	A2	Merck; Isis Pharmaceuticals	07-25-2002		
	BB	WO	02/057425	A2	Merck; Isis Pharmaceuticals	07-25-2002		
	BC	WO	02/100415	A2	F. Hoffman - La Roche AG	12-19-2002		
	BD	WO	03/061385	A1	Ribapharm Inc.	07-31-03		
	BE	WO	03/062255	A2	Ribapharm Inc.	07-31-03		
	BF	WO	03/068162	A2	Pharmasset Ltd.	08-21-03		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	BG	BEACH, J. W., <i>et al.</i> , "A highly stereoselective synthesis of anti-HIV 2',3'-dideoxy- and 2',3'-didehydro-2',3'-dideoxynucleosides," <i>J. Org. Chem.</i> 57(14):3887-3894 (1992).	
	BH	DAVIS, G.L., "Current therapy for chronic Hepatitis C," <i>Gastroenterology</i> 118:S104-S114 (2000).	
	BI	FERRARI, R., <i>et al.</i> , "Characterization of soluble hepatitis C virus RNA-dependent RNA polymerase expressed in <i>Escherichia coli</i> ," <i>Journal of Virology</i> , 73(2), 1649-1654 (1999).	
	BJ	KAO, C.C., <i>et al.</i> , "Template Requirements for RNA Synthesis by a Recombinant Hepatitis C Virus RNA-Dependent RNA Polymerase" <i>J. Virol.</i> , 74(23):11121-11128 (2000).	
	BK	LOHMANN V., <i>et al.</i> , "Biochemical and kinetic analyses of NS5B RNA-dependent RNA polymerase of the Hepatitis C virus," <i>Virology</i> , 249, 108-118 (1998).	
	BL	Merck Index, 11th edition, S. Budavari, Ed.; Merck & Co., Inc., Rahway, NJ (1989), p.1304, Sections 8199 and 8200.	
	BM	OKABE, M., <i>et al.</i> , "Synthesis of the dideoxynucleosides ddC and CNT from glutamic acid, ribonolactone, and pyrimidine bases," <i>J. Org. Chem.</i> , 53(20):4780-4786 (1988).	

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